

BILL WILLIAMS RIVER BASIN

09424450 BIG SANDY RIVER NEAR WIKIEUP, AZ

LOCATION--Lat 34°27'45", long 113°37'25", in SE_{1/4} sec. 16, T.13 N., R.13 W., Mohave County, Hydrologic Unit 15030201, on left bank 7 mi downstream from Burro Creek, 15 mi upstream from confluence with Santa Maria River, and 17 mi south of Wikieup.

DRAINAGE AREA--2,742 mi², of which 10.1 mi² are noncontributing.

PERIOD OF RECORD--Mar. 1966 to current year.

REVISED RECORDS--WDR AZ-88-1: Drainage area.

GAGE--Water-stage recorder. Elevation of gage is 1,400 ft, above sea level, from topographic map. Prior to Oct. 1, 1970, at datum 3.06 ft higher. Oct. 1, 1970, to Oct. 10, 1973, at datum 2.06 ft higher. Supplementary water-stage recorder for low flows at site 75 ft upstream at same datum from Apr. 10, 1975 to Mar. 1, 1978; Mar. 28 to Dec. 7, 1966, and Apr. 2, 1969, to Apr. 9, 1975, at site 0.8 mi downstream at different datum.

REMARKS--Records fair, except estimated discharges, which are poor. Diversions above station for irrigation of about 3,800 acres, mostly by pumping from ground water.

EXTREMES FOR PERIOD OF RECORD--Maximum discharge, 68,700 ft³/s Feb. 9, 1993, gage height, 16.00 ft, from rating curve extended above 2,200 ft³/s on basis of slope-area measurement of peak flow; minimum daily, 1.2 ft³/s Aug. 1-6, 9-11, 27; and Sept. 3, 2004.

EXTREMES FOR CURRENT YEAR--Peak discharges greater than base discharge of 1,000 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 19	1500	*27,000	*13.10

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	1.8	2.7	2.8	1.9	1.9	2.9	2.3	2.4	1.6	1.2	1.3
2	2.1	1.8	2.5	2.7	1.9	2.1	3.0	2.2	2.4	1.6	1.2	1.3
3	2.1	1.9	2.5	2.8	2.1	2.3	1.6	2.2	2.4	1.6	1.2	1.2
4	2.0	1.9	2.5	2.8	2.0	2.3	1.5	2.2	2.4	1.6	1.2	1.3
5	2.0	1.9	2.5	2.8	2.0	2.4	1.5	2.1	2.4	1.6	1.2	1.3
6	2.0	1.9	2.5	2.8	2.1	2.3	1.5	2.1	2.4	1.6	1.2	1.3
7	2.0	2.0	2.5	2.8	2.2	2.4	1.5	2.1	2.4	1.6	1.3	1.3
8	2.0	2.0	2.4	2.8	2.2	2.5	1.5	2.1	2.4	1.7	1.3	1.4
9	1.9	2.0	2.5	2.8	2.2	2.4	1.5	2.0	2.4	1.7	1.2	1.4
10	1.8	2.0	2.5	2.7	2.2	2.4	1.5	2.0	2.4	1.7	1.2	1.5
11	1.8	2.0	2.7	2.4	2.4	1.5	2.0	2.4	1.7	1.2	1.5	
12	1.8	2.5	2.9	2.7	2.4	2.4	1.6	2.0	2.4	1.7	1.3	1.4
13	1.8	2.3	2.8	2.9	2.3	2.5	1.6	2.0	2.3	1.7	1.4	
14	1.8	2.3	2.7	2.8	2.3	2.5	1.6	2.1	2.3	1.9	1.5	1.4
15	2.1	2.3	2.5	2.7	2.4	2.5	1.6	2.1	2.2	1.8	1.6	1.5
16	2.4	2.1	2.6	2.5	2.4	2.2	1.7	2.0	2.2	1.9	1.6	1.5
17	2.4	2.1	2.8	2.4	2.4	2.3	1.7	2.0	2.1	1.9	1.5	1.5
18	2.2	2.1	2.8	2.3	2.4	2.3	1.8	2.1	2.0	1.7	1.5	1.6
19	2.0	2.1	2.8	2.2	2.4	2.4	1.9	2.2	1.9	1.6	1.7	9820
20	2.0	2.0	2.7	2.2	2.5	2.4	1.9	2.1	1.9	1.6	1.5	e1400
21	2.0	2.0	2.7	2.1	2.5	2.4	2.0	2.1	1.9	1.5	1.5	e600
22	2.0	2.1	2.8	2.1	2.4	2.4	1.9	2.2	1.8	1.5	1.4	e200
23	2.0	2.1	2.8	2.1	2.8	2.4	2.1	2.2	1.8	1.4	1.4	e50
24	1.9	2.0	2.8	2.0	2.6	2.4	2.2	2.2	1.7	1.4	1.3	e20
25	1.9	2.2	2.8	2.0	2.3	2.7	2.3	e2.2	1.6	1.4	1.3	e10
26	1.9	2.3	3.0	2.0	2.4	2.7	2.3	2.4	1.6	1.4	1.3	e5.0
27	1.9	2.3	3.0	2.2	2.3	2.9	2.3	2.4	1.6	1.4	1.2	e4.5
28	1.9	2.4	3.0	2.1	2.1	3.0	2.3	2.4	1.6	1.3	1.3	e4.0
29	1.9	2.5	3.0	2.0	2.0	2.9	2.3	2.5	1.6	1.3	1.3	e4.0
30	1.8	2.7	3.0	2.0	---	2.9	2.3	2.5	1.6	1.3	1.3	e4.0
31	1.8	---	3.0	2.0	---	2.9	---	2.5	---	1.3	1.3	---
TOTAL	61.3	63.6	84.3	75.8	66.1	76.5	56.9	67.5	62.5	49.0	41.6	12146.6
MEAN	1.98	2.12	2.72	2.45	2.28	2.47	1.90	2.18	2.08	1.58	1.34	405
MAX	2.4	2.7	3.0	2.9	2.8	3.0	3.0	2.5	2.4	1.9	1.7	9820
MIN	1.8	1.8	2.4	2.0	1.9	1.9	1.5	2.0	1.6	1.3	1.2	1.2
AC-FT	122	126	167	150	131	152	113	134	124	97	83	24090
CFSM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15
IN.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2004, BY WATER YEAR (WY)

MEAN	10.4	18.5	67.3	157	335	277	36.4	8.15	4.86	5.04	19.3	29.6
MAX	100	252	737	2674	3892	1943	259	35.8	14.1	20.8	178	405
(WY)	1973	1979	1985	1993	1993	1978	1998	1980	1980	1990	1971	2004
MIN	1.98	2.12	2.14	2.38	2.08	2.47	1.90	2.02	2.08	1.58	1.34	2.84
(WY)	2004	2004	1997	1992	2000	2004	2004	1990	2004	2004	2004	1975

SUMMARY STATISTICS FOR 2003 CALENDAR YEAR FOR 2004 WATER YEAR WATER YEARS 1967 - 2004

ANNUAL TOTAL	3788.6	12851.7	79.4
ANNUAL MEAN	10.4	35.1	3.05
HIGHEST ANNUAL MEAN			586
LOWEST ANNUAL MEAN			2000
HIGHEST DAILY MEAN	505	Mar 18	9820
LOWEST DAILY MEAN	1.8	Oct 10	1.2 Aug 1
ANNUAL SEVEN-DAY MINIMUM	1.8	Oct 8	1.2 Jul 31
ANNUAL RUNOFF (AC-FT)	7510	25490	57530
ANNUAL RUNOFF (CFSM)	0.004	0.013	0.029
ANNUAL RUNOFF (INCHES)	0.05	0.17	0.39
10 PERCENT EXCEEDS	9.3	2.8	50
50 PERCENT EXCEEDS	2.6	2.1	4.8
90 PERCENT EXCEEDS	2.0	1.4	2.7

e Estimated